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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,798	02/12/2002	Hisao Hiramatsu	10873.872USWO	6236
52835	7590	05/24/2006	EXAMINER	
HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902-0902 MINNEAPOLIS, MN 55402			HYUN, PAUL SANG HWA	
			ART UNIT	PAPER NUMBER
			1743	
DATE MAILED: 05/24/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,798

Applicant(s)

HIRAMATSU ET AL.

Examiner

Paul S. Hyun

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

REMARKS

Claims 1-13 are currently pending. Amendments made to the claims have been acknowledged. In response to a written restriction requirement mailed on 04/14/06, Applicants elected the prosecution of claims 1-7 without traverse. Consequently, claims 8-13 are withdrawn from further consideration by the examiner for being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitations "decides" and "deciding" recited in lines 11, 16, 20 and 28 of claim 1 are indefinite because the limitations suggest that the measuring equipment makes conscious choices in its actions. However, the measuring equipment simply follows pre-determined protocols stored in the measurement condition storage means and other information storage means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

Art Unit: 1743

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer et al. (US 2001/0051377 A1) in view of Kalra et al. (US 5,948,359).

Hammer et al. disclose an automated cartridge-based instrument that conducts measurements. The instrument utilizes a bar-code system to automate the measurement protocols. Each cartridge container that is accommodated by the measuring instrument is assigned a unique bar code adapted to store information regarding the measurement conditions for the particular cartridge. Each cartridge is pre-loaded with samples and reagents (see [0008] Summary of the Invention) wherein the sample and the reagent are held separately within the cartridge, the sample held in system 76 and the reagent held in reagent pouch 98.

The instrument comprises a bar code reader 200 for reading the bar code attached to each cartridge, and a tracking and control system that conducts the measurement according to the information stored in the bar code (see [0061]). The bar code reader is disposed on cartridge carousel 140, which activates the metering of the contents of the cartridge (see [0010]). The American Heritage Dictionary of the English Language, Fourth Edition defines bar codes as "a series of vertical bars of varying widths, in which each of the digits zero through nine are represented by a different pattern of bars that can be read by a laser scanner." In light of the definition, it appears that specific, non-overlapping identification number is given to each cartridge disclosed in the Hammer et al. reference.

The instrument further comprises a disk inlet 22 that can accept a floppy disk that communicates with a central processing unit (CPU) located in the upper housing cover 14. According to The American Heritage Dictionary of the English Language, Fourth Edition, a floppy disk is "a flexible plastic disk coated with magnetic material and covered by a protective jacket, used primarily by computers to store data magnetically." Hammer et al. disclose that the floppy disk can be inserted into the instrument to provide software updates as well as transport other data and information into and out of the central processing unit (see [0050]). Based on the disclosure, it would have been obvious to one of ordinary skill in the art to use the floppy disk to execute the control program run by the instrument as well as transfer measurement conditions for the cartridges to the hard drive of the CPU.

Although the Hammer et al. reference does not explicitly disclose that the instrument comprises a measurement condition storage means, it is inherent that it comprises a measurement condition storage means that stores the measurement conditions stored in the bar code. If the instrument did not comprise a measurement condition storage means, then the instrument would not be able to make the transition from reading the measurement conditions stored in the bar code to conducting the measurements according to the measurement conditions.

Moreover, The Free On-Line Dictionary of Computing defines a CPU as "part of a computer that controls all other parts. The CPU also comprises memory, including RAM, cache, registers and ROM." Based on this definition, it appears that the CPU disclosed by Hammer et al. is capable of storing the measurement conditions.

The instrument disclosed by the Hammer et al. reference differs from the claimed invention in that the Hammer et al. reference does not disclose a means to process cartridges that lack bar codes.

Kalra et al. disclose an automated apparatus for staining samples disposed on microscope slides. The apparatus utilizes a bar code system to automate the staining procedure for each sample. The apparatus comprises a bar code reader for reading the specific information stored in the bar code assigned to each microscope slide. In the event that a bar-code is not properly read, or is missing, a computer is capable of identifying which slide is "missing" and a menu on the computer screen informs the operator to manually input the missing information or to re-run the scanning procedure (see lines 10-15, col. 17).

In light of the teachings of Kalra et al., it would have been obvious to one of ordinary skill in the art to provide the CPU disclosed by Hammer et al. with a means to accommodate cartridges that lack bar codes such that in the event that a cartridge lacking a bar code is identified, the CPU informs the operator of the apparatus to manually input the missing information or to re-run the scanning procedure so that the automated processing of the cartridges is not interrupted by missing or corrupt bar codes.

In regards to claim 4, although the Hammer et al. reference does not explicitly disclose that the measurement condition storage means stores the measurement conditions for each cartridge in separate areas, CPUs are well-known to be capable of creating separate, easily-identifiable folders for storing specific information

corresponding to these folders. It would have been obvious to one of ordinary skill in the art to set up the CPU such that the measurement conditions for each cartridge is stored in a separate folder for organizational purposes.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer et al. in view of Petersen et al. (US 2001/0012612 A1). Hammer et al. disclose the measuring equipment of claim 1, but the reference does not disclose a waste vessel disposed in the cartridge container to store waste liquid.

Petersen et al. disclose a cartridge adapted to be used for analyzing fluid samples stored therein. The multi-vessel cartridge comprises a chamber 68 that is used to store waste. It would have been obvious to one of ordinary skill in the art to provide a waste vessel as taught by Petersen et al. to the cartridge disclosed by Hammer et al. so that waste material from the analysis can be separated for easy disposal.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Devlin et al. (US 2002/0064884 A1).

Devlin et al. disclose an automated analytical instrument that conducts measurements of the contents of the cartridges. The instrument utilizes a bar code system to automate the measurement process.

Response to Arguments


Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection. The amendments made to claim 1 changed the scope of claims 1-7, which necessitated new grounds of rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul S. Hyun whose telephone number is (571)-272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PSH
5/15/06


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